

III. REMARKS

Claim Status

Claims 1-2, 4, 8, 10-11 and 28-31 are currently under examination on the merits. Claims 1-2, 28 and 30 have been amended; claims 29 and 31 have been cancelled.

Claim Rejections - 35 USC § 102

Claims 1-2, 4, 10-11, and 28-29 stand rejected under 35 U.S.C. 102(b) as being anticipated by Cech et al. (US 6,093,809).

The claims are drawn to a polynucleotide directed towards a gene of a catalytic subunit of human telomerase, wherein the polynucleotide binds with SEQ ID NO:4 (target mRNA region of nucleotides 2206-2225, which is complementary to SEQ ID NO:10).

The examiner notes that as previously claimed the polynucleotide specifically binds with SEQ ID NO:4, which is part of the target mRNA sequence that is claimed to "contain" an oligonucleotide sequence of SEQ ID NO:10. The term "contain" is inclusive or open-ended and does not exclude additional, unrecited elements.

The claimed polynucleotide has been limited to a 20-mer antisense oligonucleotide. As such, the claimed polynucleotide no longer embraces any antisense polynucleotide that "contains" SEQ ID NO:10 or SEQ ID NO:13, it is limited to the specific 20-mer antisense oligonucleotide.

Cech et al. do not teach the specific 20-mer antisense oligonucleotide now claimed by applicant and thus does not anticipate applicant's claimed invention. Therefore, applicant respectfully requests favorable reconsideration of this ground

for rejection.

Claims 1-2, 4, 10-11, and 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kilian et al. (US 6,846,662).

The claims are drawn to a polynucleotide directed towards a gene of a catalytic subunit of human telomerase, wherein the polynucleotide binds with SEQ ID NO:8 (target mRNA region of nucleotides 2331-2350) and contains SEQ ID NO:13 (complementary to SEQ ID NO:8).

Kilian et al. teach, at column 24, lines 14-17, that their antisense polynucleotides "are at least 7 nucleotides long and generally not longer than 100 to 200 bases, and are more typically at least 10 to 50 bases long."

The examiner specifically references Kilian et al.'s teaching of SEQ ID NO:45 and SEQ ID NO:47. The examiner highlights the fact that Kilian et al.'s SEQ ID NO:45 includes nucleotides 2240-2259 which are identical to SEQ ID NO:8 of the instant application.

However, Kilian et al.'s SEQ ID NO:45 is 3,918 nucleotides long and Kilian et al.'s SEQ ID NO:47 is 3,033 nucleotides long. These sequences do not even fall within the description of Killian et al. referenced above where their antisense polynucleotides are generally not longer than 100 to 200 bases long. There is no direction given as to which "100 to 200 bases" in the over 3,000 base length of SEQ ID NO:45 and SEQ ID NO:47 are satisfactory, let alone the specific sequences claimed by applicant.

As set forth in applicant's specification, it is the specific sequences that provide the desired functionality.

Kilian et al. does not disclose the sequences specifically claimed by applicant and therefore is not anticipatory.

Favorable reconsideration of this ground for rejection is respectfully requested.

Claims 1-2, 8, 10-11, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsuchiya et al. (US 6,608,188).

Claims 1-2, 10-11, and 28-31 are described above.

Claim 8 is drawn to the antisense polynucleotide modified by phosphothioate bonds.

As stated by the examiner, Tsuchiya et al. teach a polynucleotide comprising an antisense strand of SEQ ID NO:1 or SEQ ID NO:9 or SEQ ID NO:11, whose nucleotides 621-640 correspond to the 20-mer sequence of SEQ ID NO:4 of the instant application and whose nucleotides 746-765 correspond to the 20-mer sequence of SEQ ID NO:8 of the instant application.

Tsuchiya et al.'s polynucleotide SEQ ID NO:1 is 1,311 nucleotides in length, SEQ ID NO:9 is 1314 nucleotides in length and SEQ ID NO:11 is 1,866 nucleotides in length. There is no indication that applicant's specific 20-mer antisense oligonucleotide should be chosen or has any specific characteristics.

Applicant's claimed polynucleotide has been limited to a 20-mer antisense oligonucleotide. As such, the claimed polynucleotide no longer embraces any antisense polynucleotide that "contains" SEQ ID NO:10 or SEQ ID NO:13, it is limited to the specific 20-mer antisense oligonucleotide.

Tsuchiya et al. do not teach the specific 20-mer antisense oligonucleotide now claimed by applicant and thus does not anticipate applicant's claimed invention. Therefore, applicant respectfully requests favorable reconsideration of this ground for rejection.

For all the above reasons, applicant requests favorable reconsideration of the rejection and early allowance of the claims. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 14-1263.

Respectfully submitted,

NORRIS McLAUGHLIN & MARCUS, P.A.

By: /Serle Ian Mosoff/
Serle Ian Mosoff
Attorney for Applicant(s)
Reg. No. 25,900
875 Third Avenue - 18th Floor
New York, New York 10022
Phone: (212) 808-0700
Fax: (212) 808-0844